

INDEX

MICROBIOLOGY

Volume 35, Numbers 1-6, 1966



MICROBIOLOGY

Volume 35, Numbers 1-6, 1966

(A Translation of Mikrobiologiya)

A

Aavarizina, N. B. - 720
Abyzov, S. S. - 435, 751
Agatov, P. A. - 47, 477
Agnistikova, V. N. - 863
Akopov, É. I. - 319
Alekseeva, V. M. - 628
Al'tergot, V. F. - 479
Altukhova, L. B. - 79
Andreeva, I. V. - 112
Andrianova, M. B. - 32
Artamonova, O. I. - 875
Avakyan, Z. A. - 682
Averbukh, L. A. - 196
Azizbekyan, R. R. - 239, 448

B

Babak, N. M. - 137
Bab'eva, I. P. - 441, 602, 700
Babkova, E. A. - 248
Badumyan, L. S. - 591
Baikova, L. A. - 57
Ban'kovskaya, A. N. - 38
Baranova, N. A. - 1, 214
Bekhtereva, M. N. - 350, 477, 495
Belyaeva, N. N. - 239
Belyakova, L. A. - 777, 924
Belyanin, A. I. - 602
Bezborodova, S. I. - 190
Bilai, V. I. - 920
Binogradova, K. A. - 704
Biryuzova, V. I. - 68, 251
Blagoveshchenskii, V. S. - 226
Bogdanova, V. M. - 201, 667
Boltyanskaya, É. V. - 256
Borisova, L. N. - 374
Borovikova, N. V. - 484
Brandt, A. B. - 319
Bundel', A. A. - 484
Burd, G. I. - 112
Butenko, S. A. - 183
Buziashvili, D. M. - 275

C

Cherepenko, T. I. - 232
Chistyakova, E. A. - 794

D

Demina, A. S. - 648, 660
Deryugina, Z. P. - 297, 842
Dityatkin, S. Ya. - 103
Dmitriev, E. A. - 284
Dorosinskii, L. M. - 275
Dorozhinskii, V. B. - 79
Drabkova, V. G. - 899
Dubenko, G. D. - 232
Dubovaya, L. P. - 863

E

Egorov, N. S. - 477
Egorova, L. A. - 147
El'chits, S. V. - 5, 222
El'-Registan, G. I. - 491
Erge, D. - 511
Ermachenko, V. A. - 208
Erofeev, N. S. - 126, 918
Ershov, V. V. - 142
Evreinova, T. N. - 782

F

Fedorov, V. A. - 226
Feofilova, E. P. - 50, 350, 549
Filipenko, V. S. - 430
Filippov, V. D. - 506
Fomichev, Yu. K. - 403, 563
Frolova, M. A. - 269

G

Gabe, D. R. - 733
Gabrilovich, I. M. - 108
Galanina, L. A. - 47
Galkina, G. M. - 284
Garan, S. A. - 334, 534
Gerasimova, A. V. - 192
Gershanovich, V. N. - 112
Gogotov, I. N. - 167
Golomiz, A. I. - 430
Golovacheva, R. S. - 675
Gorbanko, Yu. A. - 762

Gorlenko, V. M. - 123
Grabovskaya, K. B. - 412
Gracheva, N. B. - 713
Greibenko, A. I. - 368
Grinevich, A. G. - 831
Gröger, D. - 511
Gromov, B. V. - 893
Gukasyan, A. B. - 152
Guzhova, E. P. - 361

I

Ierusalimskii, N. D. - 178, 477, 783
Ignat'evskaya, M. A. - 453
Il'ina, T. K. - 130, 279, 357
Il'yashenko, B. N. - 103
Imshenetskii, A. A. - 158, 435, 469, 477, 631, 668
Irtuganova, L. D. - 598
Isaeva, V. S. - 44
Ivanov, G. M. - 152
Ivanov, I. D. - 660
Ivanov, M. V. - 123, 638, 751
Ivanova, L. V. - 79
Ivkina, N. S. - 374

K

Kabailova, I. V. - 403
Kalacheva, N. - 910
Kalakutskii, L. V. - 61, 156, 248
Kaler, V. L. - 914
Kalmykova, G. Ya. - 875
Kaminir, L. B. - 628
Kanevskaya, I. G. - 737
Karasevich, Yu. N. - 183
Karavaiko, G. I. - 430, 836
Karpenko, M. K. - 328
Karpova, É. S. - 745
Karpukhina, S. Ya. - 368
Kasymova, G. A. - 495
Kats, L. N. - 556
Katsalukha, V. A. - 190
Khachatryan, L. S. - 884
Khadxhi-Murat, L. N. - 729
Khizhanovskaya, V. É. - 495

Khokhlova, Yu. M. - 350, 495, 875
 Kirillova, N. F. - 549
 Kirsanova, R. V. - 269
 Kislyakova, O. V. - 794
 Kochkina, Z. M. - 399
 Kolchinskaya, I. D. - 328
 Kolesnikova, I. G. - 57
 Kondrat'eva, E. N. - 167, 481
 Konev, Yu. E. - 516
 Konova, L. V. - 394, 768
 Konovalov, S. A. - 16
 Korotyaev, A. I. - 10
 Kosheleva, N. A. - 57
 Koslova, E. I. - 591
 Kotenko, T. V. - 269
 Kotov, V. B. - 16
 Kotskova-Kratokhvilova, A. - 653
 Kovaleva, L. A. - 269
 Kovalevskaya, R. Z. - 914
 Kozlov, E. A. - 192
 Kozlova, E. I. - 419, 477
 Kozlova, V. Kh. - 261, 425
 Kozova, Ya. - 61
 Krasikova, N. V. - 75
 Krasil'nikov, N. A. - 256, 441, 477, 491
 Kretoich, V. L. - 484, 648
 Kriviskii, A. S. - 239, 582
 Krzhanovskaya, V. E. - 350
 Ksheminskaya, G. P. - 388
 Kucherov, V. F. - 863
 Kudryavtsev, V. I. - 477
 Kulyash, Yu. V. - 827
 Kuranova, I. P. - 368
 Kurinenko, B. M. - 910
 Kuznetsov, S. I. - 154
 Kuznetsov, V. D. - 713
 Kuznetsova, I. V. - 178
 Kuznetsova, V. I. - 269
 Kuznetsova, Z. I. - 758
 Kuzyurina, L. A. - 688
 Kvasnikov, E. I. - 328

L

Lebedeva, N. E. - 549
 Lekareva, T. A. - 863
 Leonova, V. G. - 788
 Leshchinskaya, I. B. - 910
 Levchenko, L. A. - 888
 Levitov, M. M. - 5, 222
 Liberman, L. A. - 328
 Ligonova, L. G. - 675
 Lipshits, V. V. - 328
 Lirova, S. A. - 783
 Lisenkova, L. L. - 208
 Litvinenko, S. N. - 40, 672
 Lobanok, E. V. - 403, 563

Lobov, V. P. - 232
 Lobyreva, L. B. - 664
 Loginova, L. G. - 852
 Loginova, L. I. - 361
 Lovchikova, A. S. - 350
 Lozinov, A. B. - 208
 Lukel'eva, S. I. - 108
 Lukin, A. A. - 83
 Lupova, L. M. - 863
 Lur'e, L. M. - 5, 222
 Lyagina, N. M. - 713
 Lyalikova, N. N. - 842
 Lyapunova, T. S. - 341, 801
 Lysenko, A. M. - 582

M

Makarova, G. Ya. - 544
 Maksimova, I. V. - 526
 Mamkaeva, K. A. - 724, 893
 Mardashev, S. R. - 192
 Marke, B. I. - 577
 Meavad, Khasan - 700
 Medvedkova, A. A. - 269
 Medvinskaya, L. Yu. - 328
 Meisel', M. N. - 68, 477
 Mekhtieva, V. L. - 481
 Milevskii, E. I. - 265
 Mirchink, T. G. - 226
 Mishustin, E. N. - 126, 415
 Mokhova, E. N. - 788
 Moroz, P. É. - 773
 Muradov, M. - 571
 Muromtsev, G. S. - 863
 Mutuskin, A. A. - 346

N

Nakhmanovich, B. M. - 669
 Namestnikova, V. P. - 75
 Nefelova, M. V. - 28
 Nesterov, A. I. - 167
 Nesterova, G. F. - 92
 Nikitina, E. S. - 251
 Nikitina, K. A. - 218
 Norenkova, I. K. - 755
 Novak, M. I. - 419
 Novikova, A. T. - 598
 Novikova, G. A. - 477
 Novikova, S. I. - 328

O

Odoevskaya, N. S. - 316, 409
 Oleinik, I. I. - 190
 Ordin, A. P. - 291
 Orlova, N. V. - 32
 Ostrovskii, N. I. - 38

P

Paikin, M. D. - 269

Panasjuk, N. V. - 388
 Pekhov, A. P. - 539
 Peretyazhko, G. D. - 232
 Peshkov, M. A. - 577, 888
 Petrova, A. N. - 415
 Pimenova, M. N. - 526
 Pivovarov, É. V. - 713
 Poglazova, M. N. - 544
 Pokrovskaya, N. V. - 794
 Poltorak, V. A. - 567, 704
 Pomerants, L. B. - 303
 Pomoshchnikova, N. A. - 788
 Popova, L. S. - 233, 380, 815
 Pozmogova, I. N. - 147, 852
 Preobrazhenskaya, T. P. - 79
 Prosvetova, N. K. - 1

R

Rabinovich, M. S. - 5
 Rabotnova, I. L. - 475, 477, 682, 868
 Rautenshtein, Ya. I. - 323, 399, 477, 571, 729, 884
 Rehacek, Z. - 61
 Rozanova, E. P. - 117
 Ruban, E. L. - 664
 Ryabushki, T. A. - 330, 501

S

Saono, S. - 441, 622
 Serebryakov, E. P. - 863
 Seregin, V. I. - 751
 Seregina, L. M. - 852
 Sergeeva, L. N. - 875
 Shaforostova, L. D. - 918
 Shalagina, A. I. - 38
 Shaposhnikov, V. N. - 477
 Sharkova, A. S. - 888
 Shavlovskii, G. M. - 388
 Shcheblykina, N. A. - 669
 Shcherbakov, M. A. - 675
 Shchipkov, V. P. - 539
 Shenin, Yu. D. - 269
 Shestakov, S. V. - 506
 Shevchenko, L. A. - 68
 Shimon, A. - 618
 Shirokov, O. G. - 751
 Shturm, L. D. - 117
 Shvetsova, O. I. - 613
 Skryabin, G. K. - 846
 Smirnova, E. I. - 729
 Smirnova, G. P. - 190
 Smirnova, N. V. - 368
 Sokolov, A. A. - 256, 713
 Sokolov, B. V. - 269
 Sokolova-Dubinina, G. A. - 297
 Sorokin, Yu. I. - 643, 806

Sorokina, S. S. - 92
Stefanov, S. B. - 729, 884
Stopkan', V. V. - 232
Sukhorukov, K. T. - 479
Sumarukova, R. S. - 173
Surikova, E. L. - 196

T

Tanyashin, V. L. - 910
Tapytkova, S. D. - 346, 549
Tarasova, N. V. - 350, 495
Tashpulatatov, Zh. - 22
Telegina, Z. P. - 880
Tevilevich, M. B. - 328
Tikhonenko, A. S. - 98, 237, 577,
720
Tikhonenko, T. I. - 399
Timakova, N. V. - 733
Totolyan, A. A. - 448
Tret'yakova, A. N. - 609

Trotsenko, Yu. A. - 904
Tsyganov, V. A. - 75, 463, 516,
707
Tul'chonskaya, V. P. - 633
Tyagny-Ryadno, M. G. - 856

U

Ulyashova, R. M. - 739
Uspenskaya, V. É. - 173

V

Vecher, A. S. - 330
Vendilo, M. V. - 591
Verbina, N. M. - 89, 394, 768
Verkhovtseva, T. M. - 222
Vinetskii, Yu. P. - 860
Vinogradova, K. A. - 567
Vladimirova, M. G. - 453
Voitkova-Lepshikova, A. - 653
Volkova, N. A. - 556
Volkova, T. M. - 692

Vorob'eva, L. I. - 1, 214
Vorob'eva, M. T. - 794

Y

Yakovlev, B. V. - 822
Yakovleva, V. I. - 648
Yakubov, G. Z. - 350, 875

Z

Zagor'e, I. V. - 275
Zarubina, A. P. - 544
Zelepukha, S. I. - 473
Zharikova, G. G. - 83, 544
Zhukova, A. I. - 261, 425, 925
Zhukova, R. A. - 269, 707
Zinger, A. S. - 309
Zlochevskaya, I. V. - 868
Zuev, V. A. - 112
Zurabova, É. R. - 613
Zvyagintsev, D. G. - 284, 471

TABLE OF CONTENTS

MICROBIOLOGY

Volume 35, Numbers 1-6, 1966

(A Translation of Mikrobiologiya)

CONTENTS

Volume 35, Number 1

January-February, 1966

Engl./Russ.

Vitamin Biosynthesis by <i>Mycobacterium luteum</i> —L. I. Vorob'eva, N. K. Prosvetova, and N. A. Baranova	1	3
Production of Carboxypenicillin by Enzymatic Hydrolysis of Its Benzyl Ester—M. M. Levitov, L. M. Lur'e, S. V. El'chits, and M. S. Rabinovich.	5	8
Effect of Chloramphenicol on α -Ketoglutarate Dehydrogenase Activity of <i>Escherichia coli</i> and <i>Proteus vulgaris</i> —A. I. Korotyaev	10	13
Influence of Amino Acids on Dextrinase Biosynthesis in an Experimentally Produced Strain of <i>Aspergillus usarii</i> 3758/45—V. B. Kotov and S. A. Konovalov	16	20
Cellulolytic Enzymes of a Thermophilic Strain and a Mesophilic Strain of <i>Aspergillus fumigatus</i> —Zh. Tashpulatov	22	27
Conditions for Aurantin Biosynthesis—M. V. Nefelova	28	35
Biosynthesis of Oxytetracycline by <i>Actinomyces rimosus</i> in Media Containing Different Carbohydrates—N. V. Orlova and M. B. Andrianova	32	40
Growth of <i>Claviceps purpurea</i> Tul. on a Herbicide-containing Medium—A. I. Shalagina, N. I. Ostrovskii, and A. N. Ban'kovskaya	38	48
The Effect of Growth Stimulants on Some Microorganisms—S. N. Litvinenko	40	51
Vitamin Requirements of <i>Proteus vulgaris</i> Strain K—V. S. Isaeva	44	56
Effect of Hydroaromatic Compounds on Streptomycin Production by <i>Actinomyces streptomycini</i> LS-1—L. A. Galanina and P. A. Agatov	47	60
Influence of Pyrrole Derivatives and Precursors on the Growth and Pigment Formation of <i>Actinomyces longispororuber</i> —E. P. Feofilova	50	64
Characteristics of <i>Pseudomonas fluorescens</i> Strain 3B—A Producer of α -Ketoglutaric Acid—I. G. Kolesnikova, N. A. Kosheleva, and L. A. Baikova	57	72
Effect of Antimycin on the Oxidation of Benzidine—L. V. Kalakutskii, Z. Rehacek, and Ya. Kozova	61	77
Effect of Antibiotics Inhibiting Protein Synthesis on the Structural Organization of Yeast Cells—L. A. Shevchenko, V. I. Biryuzova, and M. N. Meisel'	68	85
Composition of Desoxyribonucleic Acids in Members of Different Genera of Actinomycetes—V. A. Tsyganov, V. P. Namestnikova, and N. V. Krasikova	75	92
The Infrared Spectra of Actinomycete Spores—T. P. Preobrazhenskaya, L. B. Altukhova, V. B. Dorozhinskii, and L. V. Ivanova	79	96
Effect of Various Factors on Dissociation of <i>Bacillus brevis</i> Var. G. —B. —G. G. Zharikova and A. A. Lukin	83	100
A Direct Group Screening Method for Amino Acid Producers Using Indicator Strains of Microorganisms—N. M. Verbina	89	107
Sensitivity of h-Mutants of Bacteriophage T2L to Some Physical and Chemical Factors—G. F. Nesterova and S. S. Sorokina	92	111

Defective Morphogenesis of the Head Sheath of Phage No. 1 of <u>Bacillus mycoides</u> —A. S. Tikhonenko	98	118
Investigation of Competence Towards Infections of Phage DNA in Lysozyme Spheroplasts of <u>E. coli</u> —B. N. Il'yashenko and S. Ya. Dityatkin	103	122
Radiation Sensitivity of Certain Bacteriophages—L. M. Gabrilovich and S. I. Lukel'eva ..	108	128
The Effects of Mg^{++} Ions, Spermine, and EDTA on β -Galactosidase Synthesis and Viability of <u>Escherichia coli</u> B Cells Treated with T2 Phage "Gosts" —V. N. Gershanovich, I. V. Andreeva, G. I. Burd, and V. A. Zuev	112	132
Changes in Ozocerite Composition Under the Action of Microorganisms—E. P. Rozanova and L. D. Shturm	117	138
Study of the Microbiological Formation of Hydrogen Sulfide in Oil Beds Using $S^{35}O_4$ —M. V. Ivanov and V. M. Gorlenko	123	146
Nature of the Toxic Compounds Accumulating During the Decomposition of Straw in Soil—E. N. Mishustin and N. S. Erofeev	126	150
The Effect of Molybdenum on Nitrogen Fixation by Mycobacteria—T. K. Il'ina	130	155
The Effect of Different Salts on <u>Azotobacter chroococcum</u> and <u>Azotobacter galophilum</u> —N. M. Babak	137	162
Effect of Mineral Fertilizers on Microbiological Processes in Meadow Soils in Karelia —V. V. Ershov	142	168
Effect of Temperature and Mixing on Rate of Solution of Atmospheric Oxygen in Liquid Nutrient Media—L. A. Egorova and I. N. Pozmogova	147	174
Staining of Crystals, Spores, and Vegetative Cells of Entomopathogenic Bacteria —G. M. Ivanov and A. B. Gukasyan	152	179
BOOK REVIEWS		
The Role of Microorganisms in the Formation of Iron-Manganese Deposits —Reviewed by S. I. Kuznetsov	154	181
Yu. O. Sazykin. The Biochemical Bases for the Action of Antibiotics on Microbial Cells —Reviewed by L. V. Kalakutskii	156	182
CHRONICLES		
A Symposium on the Ecology of Soil Bacteria—A. A. Imshenetskii	158	184
The Universal Decimal Classification	162	188

Volume 35, Number 2

March-April, 1966

Significance of Light Intensity for the Utilization of Various Carbon Compounds by Photosynthesizing Bacteria—A. I. Nesterov, I. N. Gogotov, and E. N. Kondrat'eva ...	163	193
Pheophorbids of Green Bacteria—V. É. Uspenskaya and R. S. Sumarukova	169	200
Influence of the Conditions of Culturing on the Oxidative Activity of Resting <u>Bacillus idosus</u> Cells—I. V. Kuznetsova and N. D. Ierusalimskii	174	206
Some Properties of Homoserine Dehydrogenase from <u>Mycobacterium album</u> Strain 13 —Yu. N. Karasevich and S. A. Butenko	179	212
Induction of Ribonuclease Biosynthesis in <u>Escherichia coli</u> and <u>Pseudomonas pyocyanea</u> —I. I. Oleinik, S. I. Bezborodova, V. V. Katsalukha, and G. P. Smimova	186	220
Production of Purified Glutaminase Preparations from <u>Clostridium welchii</u> SR-12 —S. R. Mardashev, A. V. Gerasimova, and E. A. Kozlov	188	223
On the Amino Acid Metabolism of <u>Actinomyces antibioticus</u> —E. I. Surikova and L. A. Averbukh	192	228
Physiological Properties of Microorganisms Isolated in an Atmosphere of Methane and Propane —V. M. Bogdanova	197	234
Quantitative Determination of Cytochromes in <u>Nitrosomonas europaea</u> —V. A. Ermachenko, L. L. Lisenkova, and A. B. Lozinov	204	242

Stimulating Effect of <i>Mycobacterium luteum</i> on Vitamin B ₁₂ Formation by Propionic Acid Bacteria—L. I. Vorob'eva and N. A. Baranova	210	249
Pigment Formation by <i>Mycobacterium lacticolum</i> Strain 35—K. A. Nikitina	214	253
Searches for Microorganisms Capable of Cleaving Carboxypenicillin Esters—M. M. Levitov, S. V. El'chits, L. M. Lur'e, and T. P. Verkhovtseva	218	258
Production and Characteristics of the Toxin of <i>Penicillium</i> sp. No. 19—T. G. Mirchink, V. S. Blagoveshchenskii, and V. A. Fedorov	222	263
Structure and Fungicidal Action of Monosubstituted Arylisothiocyanates—V. P. Lobov, V. V. Stopkan', T. I. Cherepenko, G. D. Dubenko, and N. Z. Peretyazhko	227	269
Production of Polyploids of Various Species of <i>Candida</i> by the Action of Mitotic Poisons—L. S. Popova	229	271
Structure of Phages of <i>Bacillus subtilis</i> and Lysogenesis of Host Cells—R. R. Azizbekyan, N. N. Belyaeva, A. S. Kriviskii, and A. S. Tikhonenko	235	279
Phage Lysis in <i>Micropolyspora</i> —L. V. Kalakutskii and E. A. Babkova	244	287
Analogues of the Mitochondria in Cells of the Facultative Aerobe <i>Lactobacillus delbrückii</i> —V. I. Biryuzova and É. S. Nikitina	247	291
Degeneration of the Flagella of <i>Azobacter</i> —N. A. Krasil'nikov, É. V. Boltyanskaya, and A. A. Sokolov	252	296
The Resistance of Some Strains of Microorganisms to the Action of Ultraviolet Rays—A. I. Zhukova and V. Kh. Kozlova	257	302
The Polysaccharide of <i>Bacillus mucilaginosus</i> as a means of Protecting Microorganisms against Ultraviolet Radiation—E. I. Milevskii	261	307
Screening of Actinomyces with Antivirus Activity—R. A. Zhukova, R. V. Kirsanova, L. A. Kovaleva, T. V. Kotenko, V. I. Kuznetsova, A. A. Medvedkova, B. V. Sokolov, M. D. Paikin, M. A. Frolova, and Yu. D. Shenin	265	312
Determination of the Nitrogen-Fixing Capacity of Nodular Bacteria on the Basis of Enzyme Activity—L. M. Dorosinskii, I. V. Zagor'e, and D. M. Buziashvili	271	319
The Effect of Copper, Cobalt, and Other Trace Elements on the Fixation of Nitrogen by Soil <i>Mycobacteria</i> —T. K. Il'ina	275	323
Effect of Method of Preparing Soil for Microbiological Analysis on Bacterial Count—D. G. Zvyagintsev, E. A. Dmitriev, and G. M. Galkina	280	328
The Microflora of Grain Wheat with Special Reference to the Date of Harvesting and to the Growing Area—A. P. Ordín	287	337
The Role of Microorganisms in the Formation of Oxidized Ores in the Chiatura Manganese Deposits—G. A. Sokolova-Dubinina and Z. P. Deryugina	293	344
A Facultative-Autotrophic <i>Thiobacillus</i> Isolated from Underground Waters of Oil and Sulfur Deposits—L. B. Pomerants	299	350
Microflora of Underground Waters in the Lower Volga Region with Reference to Its Use for Oil Prospecting—A. S. Zinger	305	357
Cultivation of <i>Lyngbya aestuarii</i> in Laboratory Conditions—N. S. Odoevskaya	312	365
An Automatic Photometer for Measuring the Density of Suspensions of Unicellular Algae—A. B. Brandt and É. I. Akopov	315	369
CHRONICLES		
The First Congress of Bulgarian Microbiologists—Ya. I. Rautenshtein	319	374
[Aquatic Microbiology at the 16th International Limnological Congress—A. G. Rodina		376]
A Conference to Discuss Special Methods of Microscopy for Microbiological Production Control—M. N. Poglazova, E. P. Feofilova, and V. M. Alekseeva	322	379
Minna Lazarevna Nepomnyashchaya—M. K. Karpenko, E. I. Kvasnikov, I. D. Kolchinskaya, V. V. Lipshits, L. A. Liberman, L. Yu. Medvinskaya, S. I. Novikova, and M. B. Tevilevich	324	381

The Principal Tasks of Microbiology in the Light of the Decisions of the 23rd Congress of the CPSU	327	385
On the Activity of Decarboxylases in Actinomycetes—T. A. Ryabushko and A. S. Vecher . .	330	389
Utilization of N-Carbamylhomoserine and Its Amide in Uracil Biosynthesis in Yeasts —S. A. Garan	334	393
Carbohydrates in Sterine-Producing Yeast—T. S. Lyapunova	341	402
Determination of the Composition of the Cytochromes in Actinomycetes —S. D. Tapytkova and A. A. Mutuskin	346	408
Effect of the Nitrogen Content in the Medium on the Composition of Mycetins in <i>Actinomyces violaceus</i> Strain 719—M. N. Bekhtereva, G. Z. Yakubov, A. S. Lovchikova, E. P. Feofilova, N. V. Tarasova, Yu. M. Khokhlova, and V. E. Krzhanovskaya	350	413
A Study of the Role of Molybdenum in the Biological Fixation of Nitrogen by <i>Mycobacteria</i> —T. K. Il'ina	357	422
Thermophilic Bacteria Forming Active Amylase—E. P. Guzhova and L. I. Loginova	361	427
Production of Pure Preparations of α -Amylase from a Thermophilic Strain of <i>Bacillus subtilis</i> and Study of Its Properties—L. P. Kuranova, S. Ya. Karpukhina, N. V. Smirnova, and A. I. Grebenko	368	435
Recombinants of <i>Actinomyces streptomycini</i> —L. N. Borisova and N. S. Ivkina	374	441
Morphological and Biochemical Properties of Polyploid Forms of <i>Candida scottii</i> —L. S. Popova	380	448
Adenine-Deficient Mutant of <i>Candida guilliermondii</i> , Capable of Synthesizing Increased Quantities of Riboflavin—G. M. Shavlovskii, G. P. Ksheminskaya, and N. V. Panasyuk	388	458
Microbiological Methods of the Quantitative Determination of Lysine and Tryptophan with Mutants of <i>Escherichia coli</i> —N. M. Verbina and I. V. Konova	394	466
Concentration and Purification of Actinophage on DEAE-Cellulose—Z. M. Kochkina, Ya. I. Rautenshtein, and T. I. Tikhonenko	399	472
Effects of Di-(2-Chloroethyl)methylamine on Phages of <i>Escherichia coli</i> —Yu. K. Fomichev, L. V. Kabailova, and E. V. Lobanok	403	477
Obtention of Hormogonia of <i>Lyngbya aestuarii</i> —N. S. Odoevskaya	409	484
A Study of the Flagellation of <i>Aeromonas punctata</i> —K. B. Grabovskaya	412	488
Formation of Free Amino Acids on Cellulose Decomposing in Soil—E. N. Mishustin and A. N. Petrova	415	491
Study of the Metabolism of Flavobacteria Isolated from the Rhizosphere of Agricultural Plants—E. I. Kozlova and M. I. Novak	419	496
The Viability of Microorganisms in the Desert Soils of Turkmen—A. I. Zhukova and V. Kh. Kozlova	425	503
Bacterial Regeneration of Ferric Sulfate and Leaching of Copper from Ore —G. I. Karavaiko, A. I. Golomiz, and V. S. Filipenko	430	509
A Contamination-Safe Method of Microbiological Analysis of Meteorites and Rocks —A. A. Imshenetskii and S. S. Abyzov	435	517
Stimulation of the Sexual Process in Fungi by Soil Yeasts—S. Saono, N. A. Krasil'nikov, and I. P. Bab'eva	441	524
A Synthetic Medium for Studying Streptococci—A. A. Totolyan and R. R. Azizbekyan	448	532
The Study of the Influence of Conditions of Storage of <i>Chlorella</i> Cultures in a Collection on Their Subsequent Productivity—M. G. Vladimirova and M. A. Ignat'evskaya	453	538
The Comparison of Actinomycetes by the Precipitation Reaction in Agar—V. A. Tsyganov . .	463	549
CRITICISM		
C. Lamanna and M. F. Mallette. "Basic Bacteriology," 3rd edition. Williams and Wilkins Company, Baltimore, 1965, 1001 pages—Reviewed by A. A. Imshetskii	469	555

CHRONICLES

Meeting of the Soil Microbiology Section "Pedoscopy and Direct Microscopy of Soil"		
-D. G. Zvyagintsev	471	557
Fifth Conference on the Problem of Phytoncides-S. I. Zelepukha	473	559
Report on the Work on the Moscow Section of the All-Union Microbiological Society for 1963-1965-I. L. Rabotnova	475	560
Aleksandra Yakovlevna Manteifel' on Her 80th Birthday (1886-1961)		
-A. A. Imshenetskii, V. N. Shaposhnikov, N. D. Ierusalimskii, M. N. Meisel', N. A. Krasil'nikov, Ya. I. Rautenshtein, M. N. Bekhtereva, I. L. Rabotnova, N. S. Egorov, E. I. Kozlova, V. I. Kudryavtsev, P. A. Agatov, and G. A. Novikova...	477	562
Al'bert Reingol'dovich Verner-V. F. Al'tergot and K. T. Sukhorukov	479	564

Volume 35, Number 4 July-August, 1966

Fractionation of Stable Isotopes of Sulfur by Green Photosynthesizing Bacteria		
-E. N. Kondrat'eva and V. L. Mekhtieva	481	569
Assimilation of N ¹⁵ -Hydroxylamine in the Form of the Oxime by Azotobacter-A. A. Bundel', V. L. Kretovich, and N. V. Borovikova	484	573
A Study of the Pigments of the Red-Orange Actinomycetes-N. A. Krasil'nikov and G. I. El'-Registan	491	581
Pigment Biosynthesis in Actinomyces longissimus Rameus in Relation to the Growth of the Culture and Composition of the Media-M. N. Bekhtereva, Yu. M. Khokhlova, N. V. Tarasova, V. É. Khizhanovskaya, and G. A. Kasymova	495	586
On the Activity and Nature of the Action of Lecithinases in Actinomycetes-T. A. Ryabushko ..	501	594
Induced Synthesis of Histidase in Bacillus brevis var. G.-B.-V. D. Filippov and S. V. Shestakov ..	506	600
Formation of Lysergic Acid Derivatives in a Submerged Culture of Claviceps paspali Stevens et Hall-D. Gröger and D. Erge	511	606
Verticillate Actinomycetes-Producers of Polyenic Antibiotics-Yu. E. Konev and V. A. Tsyganov	516	612
Nature of the Organic Compounds Excreted into the Medium by Growing Cultures of Green Algae-L. V. Maksimova and M. N. Pimenova	526	623
Effect of the Sodium Salt of N-Carbamylhomoserine and Its Amide on the Growth of Various Microorganisms-S. A. Garan	534	633
Incorporation of 5-Bromouracil into the DNA of Donor Cells and Mating of Escherichia coli K-12 -A. P. Pekhov and V. P. Shchipkov	539	640
Formation and Development of Colonies of Dissociated Forms of Bacillus brevis var. G.-B. -G. G. Zharikova, G. Ya. Makarova, M. N. Poglazova, and A. P. Zarubina	544	647
A Study of the Respiration of Colored and Colorless Variants of Actinomyces longispororuber -E. P. Feofilova, N. E. Lebedeva, S. D. Tapytkova, and N. F. Kirillova	549	651
A Cytochemical and Electron-Microscopic Investigation of the Capsules of Certain Bacteria -L. N. Kats and N. A. Volkova	556	660
A Cytomorphological Study of the Antimitotic Action of Di-(2-Chloroethyl)-Methylamine -Yu. K. Fomichev and E. V. Lobanok	563	667
Nature of the Characteristic Fluorescence of the Brown Actinomycetes-V. A. Poltorak and K. A. Vinogradova	567	672
Effect of a High Hydrostatic Pressure on Some Lysogenic Strains of Actinomycetes and on Their Moderate Phages- Ya. I. Rautenshtein and M. Muradov	571	677
A Bacteriophage against the Multicellular Microorganism Caryophanon tenue Peshkoff -M. A. Peshkov, A. S. Tikhonenko, and B. I. Marek	577	684
Production of Genetically Pure Lines of Phage Sd and Its Mutants in High Titers -A. S. Kriviskii and A. M. Lysenko	582	688

Properties of Bacteria from the Nodules of Sea Buckthorn—E. I. Koslova, L. S. Badumyan, and M. V. Vendilo	591	699
Heteroauxin Production by Soil Microorganisms—A. T. Novikova and L. D. Irtuganova	598	707
Yeasts of the Rhizosphere—I. P. Bab'eva and A. I. Belyanin	602	712
Effect of Light on Growth and Nitrogen Fixation by Soil Blue-Green Algae —A. N. Tret'yakova	609	721
Pigment-Producing Variants of <i>Bacillus thuringiensis</i> Berliner from the Silkworm —O. I. Shvetsova and É. R. Zurabova	613	726
An Agar-Diffusion Method for the Determination of Etiocobalamin—A. Shimon	618	732
Method of Primary Screening of Growth Stimulating Microorganisms by Means of <i>Chlorella</i> sp. —S. Saono	622	736
Fluorometric Method for Automatic Counting of Bacteria in Smears—L. B. Kaminir and V. M. Alekseeva	628	743
BOOK REVIEWS		
M. Frobisher. Fundamentals of Microbiology—Reviewed by A. A. Imshenetskii	631	749
A. E. Kriss, L. E. Mishustina, I. N. Mitskevich, and É. V. Zemtsova. The Microbial Population of the World Ocean—Reviewed by V. P. Tul'chonskaya	633	750
CHRONICLES		
Meeting of the Section of Geological and Water Microbiology of the All-Union Microbiological Society. Fractionation of Stable Isotopes by Microorganisms—M. V. Ivanov	638	755
Antonina Gavrilovna Rodina—A Group of Her Comrades	641	758

Volume 35, Number 5

September-October, 1966

Sources of Energy and Carbon for Biosynthesis in Sulfate-Reducing Bacteria—Yu. I. Sorokin ...	643	761
Alanine Dehydrogenase of <i>Aspergillus niger</i> —A. S. Demina, V. I. Yakovleva, and V. L. Kretovich	648	767
Glucamylases of the Aspergilli—A. Voitkova-Lepshikova and A. Kotskova-Kratokhvilova	653	773
Influence of Inhibitors on the Chain of Electron Transfer in Purple Bacteria in Connection with the Fixation of Molecular Nitrogen—I. D. Ivanov and N. S. Demina	660	780
The Effect of Thiols on the Accumulation of Free Amino Acids in Cultures of Microorganisms —E. L. Ruban and L. B. Lobyreva	664	784
Hydrocarbon Nutrition of Propane-Oxidizing Bacteria—V. M. Bogdanova	667	787
Fermentation of Raffinose by <i>Clostridium acetobutylicum</i> —N. A. Shcheblykina and B. M. Nakhmanovich	669	789
The Effect of Growth Stimulators on the Development of a Streptomycin-Producing Organism —S. N. Litvinenko	672	792
Thermophilic Bacteria Forming Active Cellulolytic Enzymes—L. G. Loginova, R. S. Golovacheva, and M. A. Shcherbakov	675	796
Determination of the Copper Concentrations Toxic to Microorganisms—Z. A. Avakyan and I. L. Rabotnova	682	805
Variability in <i>Aspergillus niger</i> Induced by the Combined Effect of Ethyleneimine and Ultraviolet Irradiation—A. A. Imshenetskii and L. A. Kuzyurina	688	812
Structural and Ultrastructural Changes in <i>Endomyces magnusii</i> in Hypervitaminosis and Avitaminosis B ₁ —T. M. Volkova	692	817
The Two Types of Spore Formation in Lipomyces—I. P. Bab'eva and Khasan Meavad	700	824
The Effect of the Composition of the Medium on the Native Fluorescence of Brown Grey Actinomycetes—K. A. Vinogradova and V. A. Poltorak	704	829
Comparative Study of Actinomycetes of the Genera <i>Macrospora</i> and <i>Microellobospora</i> —R. A. Zhukova and V. A. Tsyganov	707	833

Systematic Position of Novobiocin Producers—V. D. Kuznetsov, N. M. Lyagina, N. B. Gracheva, É. V. Pivovarova, and A. A. Sokolov	713	841
Morphology of the Lytic Agent of <i>Chlorella pyrenoidosa</i> —A. S. Tikhonenko and N. B. Zavarizina	720	850
Studies of Lysis in Cultures of <i>Chlorella</i> —K. A. Mamkaeva	724	853
Defective Lysogenesis of a Culture of the Streptomycin Producer <i>Actinomyces streptomycini</i> Kras—Ya. I. Rautenshtein, S. B. Stefanov, E. I. Smirnova, and L. N. Khadzhi-Murat	729	860
Role of Amino and Carboxyl Groups of the Cell Wall of <i>Escherichia coli</i> C in Adsorption of Phage ϕ X174—N. V. Timakova	733	864
Decomposition of Methylcellulose by Soil Fungi—I. G. Kanevskaya	737	868
The Species Composition of the Microflora of Hydroponic and Soil Cultures of Tomatoes—R. M. Ulyashova	739	871
The Effect of the Long-Term Application of Fertilizers on the Development of the Soil Microflora—É. S. Karpova	745	878
Survival of Microorganisms in Potassium-Salt Deposits—S. S. Abyzov, G. A. Zavarzin, M. V. Ivanov, V. I. Seregin, and O. G. Shirokov	751	885
Mycobacteria Isolated from Water Underlying the Petroleum Deposits of Northeastern Sakhalin—I. K. Norenkova	755	890
Distribution of Bacteria in Ground Water as a Function of Environmental Redox Conditions—Z. I. Kuznetsova	758	894
Species Composition and Characteristics of Periphytonic Marine Bacteria Isolated from Growth-Retardant Paints—Yu. A. Gorbenko	762	899
The Quantitative Determination of Tryptophan by Means of a Diffusion Method with Indicator Cultures of <i>Escherichia coli</i> and <i>Bacillus subtilis</i> —I. V. Konova and N. M. Verbina	768	906
Freezing Flow Device for Cryomicroscopy—P. É. Moroz and D. R. Gabe	773	912
CRITICISM		
N. I. Gaponenko. Survey of the Fungi of the Bukhara Region — Reviewed by L. A. Belyakova ...	777	918
CHRONICLES		
[The Work of the Symposium on Microorganisms and Uninterrupted Cultivation		920]
Scientific Conference of the Moscow Branch of the All-Union Microbiological Society	779	923
Determination of the Biomass of Cells of Microorganisms (to 10^{-13} g) by the Method of Interference Microscopy—T. N. Evreinova	782	925

Volume 35, Number 6

November-December, 1966

Regularities of Growth and Oxygen Consumption by Cultures of <i>Candida</i> on Different Substrates—S. A. Lirova and N. D. Ierusalimskii	783	937
Variability of the Cytochrome Systems in Yeasts—V. G. Leonova, E. N. Mokhova, and N. A. Pomoshchnikova	788	944
Biosynthesis of Glucose Oxidase and Catalase by <i>Penicillium vitale</i> on Media with Different Carbohydrates—N. V. Pokrovskaya, M. T. Vorob'eva, O. V. Kislyakova, and E. A. Chistyakova	794	951
Importance of Endogenous and Exogenous Carbohydrates in the Biosynthesis of Ergosterol by Yeasts—T. S. Lyapunova	801	960
Investigation of the Structural Metabolism of Sulfate-Reducing Bacteria with C^{14} —Yu. I. Sorokin	806	967
Growth and Development of Parent and Polyploid Cultures of <i>Candida scottii</i> on Complex and Synthetic Media—L. S. Popova	815	978
Pyruvic Acid Metabolism in <i>Proteus vulgaris</i> OX ₁₉ and Its Sensitivity to the Effects of Certain Antibiotics—B. V. Yakovlev	822	987
Metabolism in <i>Escherichia coli</i> and <i>Staphylococcus aureus</i> Variants under Different Conditions of Culture—Yu. V. Kulyash	827	994

	Engl./Russ.
Activation of Diacetyl Formation by <u>Streptococcus diacetilactis</u> —A. G. Grinevich	831 998
Role of Thionic Bacteria in the Oxidation of Sulfide Ores in the Kafan Deposit —G. I. Karavaiko	836 1004
Microbiological Investigation of Certain Sulfide Deposits of the Northern Caucasus —N. N. Lyalikova and Z. P. Deryugina	842 1012
Hydrolysis of Steroid Esters by Mycobacteria—K. A. Koshcheenko and G. K. Skryabin	846 1017
Isolation of and Studies on Some of the Properties of Yeasts Growing at 40-45°C —L. G. Loginova, I. N. Pozmogova, and L. M. Seregina	852 1024
Formation of Amino Acids by Microorganisms in Culture Fluid and in Soil —M. G. Tyagny-Ryadno	856 1028
Radiation Injury and Protection of Single-Stranded RNA and DNA Bacteriophages —Yu. P. Vinetskii	860 1033
Gibberellins and Gibberellin-Like Substances from the Culture Fluid of <u>Fusarium moniliforme</u> —V. N. Agnistikova, L. P. Dubovaya, T. A. Lekareva, L. M. Lupova, G. S. Muromtsev, V. F. Kucherov, and E. P. Serebryakov	863 1037
Toxicity of Lead for <u>Aspergillus niger</u> —I. V. Zlochevskaya and I. L. Rabotnova	868 1044
Nature of the Pigment Antibodies of Certain New Species of Violet Actinomycetes —G. Z. Yakubov, Yu. M. Khokhlova, O. I. Artamonova, L. N. Sergeeva, and G. Ya. Kalmykova	875 1053
Species Composition of Butane-Utilizing Microorganisms—Z. P. Telegina	880 1059
Structure of Some Bacteriophages of the <u>Bacillus cereus-thuringiensis</u> Group—S. B. Stefanov, Ya. I. Rautenshtein, and L. S. Khachatryan	884 1064
Mode of Formation and Ultrafine Structure of Heteromorphic Forms of <u>Caryophanon latum</u> Peshkoff—M. A. Peshkov, L. A. Levchenko, and A. S. Sharkova	888 1069
Endoparasites of Protococcal Algae—B. V. Gromov and K. A. Mamkaeva	893 1073
Redox Potential and Distribution of Bacteria in the Surface Mud of Some Lakes of the Karelian Isthmus—V. G. Drabkova	899 1080
Green Photosynthetic Bacteria Isolated from Sernoe Lake—Yu. A. Trotsenko	904 1087
Purification of Extracellular Nucleodepolymerases of <u>Serratia marcescens</u> —I. B. Leshchinskaya, V. I. Tanyashin, B. M. Kurinenko, and N. Kalacheva	910 1094
Determination of the Self-Absorption Curve in Experiments Employing Radiocarbon —V. L. Kaler and R. Z. Kovalevskaya	914 1100
CHRONICLES	
[Microbiological Methods of Fighting Pests in the United States	1104]
[Ninth Session of KOSPAR	1107]
International Seminar on the Continuous Cultivation of Microorganisms—L. D. Shaforostova and N. S. Erofeev	918 1110
Daniil Kirillovich Zabolotnyi—V. I. Bilai	920 1112
Conference of the Moscow Department of the All-Union Microbiological Society —L. A. Belyakova	924 1115
Meeting of the Moscow Department of the All-Union Microbiological Society—A. I. Zhukova, ...	925 1115
INDEX	
Author Index, Volume 35, Numbers 1-6, 1966	929
Table of Contents, Volume 35, Numbers 1-6, 1966	932

NOTE

The Table of Contents lists all material that appeared in the original Russian journal. Items originally published in English or generally available in the West are not included in the translation and are shown in brackets. Whenever possible, the English-language source containing the omitted items is given.



